

WHAT IS CLAIMED IS:

1. A method of operating a fuser unit for duplex printing, comprising:
 - providing a hot roll and a backup roll in nipped relation, and a drive system including a drive motor for causing the rotation of the rolls;
 - operating the motor at a first process speed in a first direction for advancing media between the hot roll and backup roll for fusing an image on a first side of the media;
 - reversing the direction of operation of the motor to begin duplex routing of the media by operating the motor in an opposite direction from the first direction;
 - re-reversing the direction of operation of the motor while media is routed back to the nip formed between the hot roll and the backup roll; and
 - operating the motor at a speed greater than the first process speed for a time while routing the media back to the nip formed between the hot roll and the backup roll.
2. The method of claim 1, said step of operating the motor at a speed greater than the first process speed being performed by operating the motor at a speed of about twice the first process speed.
3. The method of claim 1, said fuser having a second process speed greater than the first process speed, and said step of operating the motor at a speed greater than the first speed being performed by operating the motor at the second process speed.
4. The method of claim 3, said step of operating the motor at a speed greater than the first process speed being performed by operating the motor at a speed of about twice the first speed.
5. The method of claim 1, said fuser being operated in a one-image mode.
6. The method of claim 5, said step of operating the motor at a speed greater than the first process speed being performed by operating the motor at a speed of about twice the first process speed.

7. The method of claim 5, including the additional step of stopping the media during duplex routing.

8. The method of claim 1, said fuser being operated in a two-image mode.

9. The method of claim 8, said step of operating the motor at a speed greater than the first process speed being performed by operating the motor at a speed of about twice the first process speed.

10. The method of claim 1, including preheating the backup roll before said step of operating the motor at a first process speed in a first direction for advancing media between the hot roll and backup roll for fusing an image on a first side of the media.

11. The method of claim 10, said preheating performed by rotating the hot roll and the backup roll at greater than the first process speed.

12. A method of operating a fuser unit for duplex printing, comprising:
providing a hot roll and a backup roll in nipped relation, and a drive system including a drive motor for causing the rotation of the rolls;
operating the motor at a first process speed in a first direction for advancing media between the hot roll and backup roll for fusing an image on a first side of the media;
5 stopping rotation of the hot roll and the backup roll after fusing an image on a first side of the media;
resuming rotation of the hot roll and the backup roll before advancing the media between the hot roll and the backup roll for fusing an image on a second side of the media; and
10 operating the motor at a speed greater than the first process speed after said resuming rotation.

13. The method of claim 12, said step of operating the motor at a speed greater than the first process speed being performed by operating the motor at a speed of about twice the first process speed.

14. The method of claim 13, said fuser being operated in a one-image mode.

15. The method of claim 12, said fuser being operated in a two-image mode.

16. The method of claim 15, said step of operating the motor at a speed greater than the first process speed being performed by operating the motor at a speed of about twice the first process speed.

17. The method of claim 12, said fuser being operated in a one-image mode.

18. The method of claim 12, including preheating the backup roll before said step of operating the motor at a first process speed in a first direction for advancing media between the hot roll and backup roll for fusing an image on a first side of the media.

19. The method of claim 18, said preheating performed by rotating the hot roll and the backup roll at greater than the first process speed

20. A method of operating a fuser unit for duplex printing, comprising:
providing a hot roll and a backup roll in nipped relation, and a drive system including a drive motor and drive train for causing the rotation of the rolls;
operating the motor at a first process speed in a first direction for advancing media between the hot roll and backup roll for fusing an image on a first side of the media;

disengaging the hot roll from the drive train after fusing an image on a first side of the media;

re-engaging the hot roll with the drive train before advancing the media between the hot roll and the backup roll for fusing an image on a second side of the media; and

operating the motor at a speed greater than the first process after said step of re-engaging the hot roll with the drive train.

21. The method of claim 20, said step of operating the motor at a speed greater than the first process speed being performed by operating the motor at a speed of about twice the first process speed.